



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-1068; Product Identifier 2018-NM-140-AD; Amendment 39-19655; AD 2019-11-09]

RIN 2120-AA64

Airworthiness Directives; Airbus SAS Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Airbus SAS Model A319-113 and -114 airplanes, and Model A320-211 and -212 airplanes. This AD was prompted by a report that a life-limit of 64,000 flight cycles has been established for certain titanium crossbeams of the forward engine mount. This AD requires repetitive replacements of all affected crossbeams of the forward engine mount, as specified in European Aviation Safety Agency (EASA) ADs, which are incorporated by reference.

The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For the material incorporated by reference (IBR) in this final rule, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 89990 1000; email ADs@easa.europa.eu; internet www.easa.europa.eu. You may find this IBR material on the EASA website at <https://ad.easa.europa.eu>. You may view this IBR material at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available in the AD docket on the Internet at <http://www.regulations.gov>.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-1068; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Sanjay Ralhan, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3223.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Airbus SAS Model A319-113 and -114

airplanes, and Model A320-211 and -212 airplanes. The NPRM published in the Federal Register on February 7, 2019 (84 FR 2465). The NPRM was prompted by a report that a life-limit of 64,000 flight cycles has been established for certain titanium crossbeams of the forward engine mount. The NPRM proposed to require repetitive replacements of all affected crossbeams of the forward engine mount.

The FAA is issuing this AD to address failure of a crossbeam of the forward engine mount, which could result in detachment of the engine and consequent reduced controllability of the airplane.

The EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2018-0212R1, dated March 28, 2019 (“EASA AD 2018-0212R1”) (also referred to as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for all Airbus SAS Model A319-113 and -114 airplanes, and Model A320-211 and -212 airplanes. The MCAI states:

The forward engine mount crossbeam of the CFM56-5A engine, [part number] P/N 238-0204-501, is made of titanium. A life limit of 64,000 FC [flight cycles] has been demonstrated. Due to potential transferability of a crossbeam from one aeroplane to another, it is necessary to track the life of this part and to remove it before exceeding the life limit.

This condition, if not corrected, could lead to forward engine mount crossbeam failure, possibly resulting in engine detachment in flight and consequent reduced control of the aeroplane.

To address this potential unsafe condition, Airbus published the SB [Service Bulletin A320-71-1073, dated June 8, 2018], providing instructions to identify the P/N of the crossbeam installed on an aeroplane and to remove affected crossbeam before exceeding the life limit. Airbus also issued SB A320-71-1076, providing modification

instructions for installation of improved forward engine mount steel crossbeams P/N 642-2002-503. Consequently, EASA issued AD 2018-0212 [which was referred to as the appropriate source of service information for accomplishing the actions specified in the FAA NPRM], requiring the implementation of the new life limit for the affected crossbeams.

Since that [EASA] AD was issued, following a re-assessment of comments received during the consultation period of [Proposed Airworthiness Directive] PAD 18-091 which preceded EASA AD 2018-0212, EASA agrees that an affected crossbeam having P/N 238-0204-501 can be (re)installed on any aeroplane, provided its accumulated life is less than the applicable life limit.

For the reason described above, this [EASA] AD is revised accordingly.

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-1068.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA's response to each comment.

Support for the NPRM

Donovan Twiddle, Jr., agreed that the proposed AD should be implemented.

Request for Exception to EASA AD Requirement

Delta Air Lines (DAL) asked that the proposed AD include an exception to the language in paragraph (2) of EASA AD 2018-2012, which specifies "Replacing on an aeroplane any affected crossbeam with crossbeam having P/N 642-2002-503 in accordance with instructions provided by Airbus is an acceptable alternative method to comply with the requirements of paragraph (1) of this [EASA] AD, provided that,

following modification, no affected crossbeam is installed on that aeroplane.” DAL stated that omitting the language “provided that, following modification, no affected crossbeam is installed on that aeroplane” would allow for the crossbeam having P/N 642-2002-503 to be managed like any other CFM56 life-limited engine component, while continuing to prohibit installing a crossbeam that has been modified to have P/N 642-2002-503.

DAL pointed out that, since the NPRM was published, the EASA has issued EASA AD 2018-0212R1, which addresses its original request (described previously) and, therefore, requested that the NPRM be revised to refer to EASA AD 2018-0212R1 as the appropriate source of information for complying with the proposed AD.

The FAA agrees that this final rule should refer to EASA AD 2018-0212R1 for accomplishing the required actions. As noted by the commenter, paragraph (2) of EASA AD 2018-0212R1 does not contain the language “provided that, following modification, no affected crossbeam is installed on that aeroplane.” The agency determined that no additional work is required for airplanes that have accomplished the actions as required by EASA AD 2018-0212, dated September 28, 2018 (“EASA AD 2018-0212”). Therefore, the agency has revised all applicable sections in this final rule to also specify EASA AD 2018-0212R1.

Request to Revise Crossbeam Accumulated Life Definition

DAL asked that the FAA revise the proposed AD to include a revised definition of crossbeam accumulated life. DAL stated that it received information from Airbus indicating that the data contained in the life estimation tables of EASA AD 2018-0212 and EASA AD 2018-0212R1, and in Airbus Service Bulletin A320-71-1073, dated June 8, 2018, and Revision 01, dated January 3, 2019, was generated using 2015 fleet

utilization data. DAL noted that Airbus has received updated fleet utilization data from 2017 that better estimates the flight cycle count for operators, and substantiates a compliance window later than the January 31, 2019 date required by EASA AD 2018-0212 and EASA AD 2018-0212R1, and the referenced service information. DAL added that there are operators that have the ability to trace the actual accumulated mount assembly and crossbeam flight cycles from dates earlier than “Life estimation done on” date of the life estimation tables included in Appendix 01 of EASA AD 2018-0212 and EASA AD 2018-0212R1. DAL explained that Airbus has been able to provide operators with an accumulated life estimation that takes Airbus’s updated fleet utilization Monte Carlo counting method and the operator’s actual flight cycle data into account. DAL went on to explain that the updated Monte Carlo counting method also includes crossbeams where the date of manufacture was not explicitly known and was assumed to be before January 1, 1988. For crossbeams where the date of manufacture was not identified, DAL stated that it believes the use of Airbus data and maintenance records, while still assuming a date of manufacture before January 1, 1988, would not adversely affect the level of safety of the airplane. By still assuming the worst case scenario for the date of manufacture, DAL asserted that the most conservative estimate for crossbeam accumulated life is still being used. DAL provided a revised definition of crossbeam accumulated life, and stated that the proposed definition would allow operators to use the updated Monte Carlo counting method from Airbus and maintenance records for all crossbeams, as well as also taking into account the fact that the final rule should require the use of “total flight cycles.”

The FAA does not agree with the commenter's request. The agency has not received any new life estimation data either from EASA or Airbus, other than that referenced in EASA AD 2018-0212R1. After the NPRM comment period closed, the FAA contacted EASA; EASA confirmed that the life estimation table in Appendix 1 of EASA AD 2018-0212R1 is based on the latest data received from Airbus. In addition, the agency does not have access to the latest data referenced by DAL. In order to calculate flight cycles based on new fleet utilization information received from Airbus, which would allow DAL to continue operation with the affected part later than EASA's estimation, DAL may request approval of an alternative method of compliance (AMOC) under the provisions of paragraph (i)(1) of this AD. The FAA has not changed this AD regarding this issue.

Conclusion

The FAA reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule with the changes described previously and minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

The FAA has also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

Related IBR Material Under 1 CFR part 51

EASA ADs 2018-0212 and 2018-0212R1 describe procedures for repetitive replacements of all affected crossbeams of the forward engine mount and an optional replacement as an acceptable method of compliance for the required replacement. These documents are distinct since AD 2018-0212R1 includes updated requirements and definitions, and references updated service information. This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects 59 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Up to 134 work-hours X \$85 per hour = Up to \$11,390	Up to \$23,278	Up to \$34,668	Up to \$2,045,412

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by

prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2019-11-09 Airbus SAS: Amendment 39-19655; Docket No. FAA-2018-1068; Product Identifier 2018-NM-140-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Airbus SAS Model A319-113 and -114 airplanes, and Model A320-211 and -212 airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 71, Powerplant.

(e) Reason

This AD was prompted by a report that a life-limit of 64,000 flight cycles has been established for certain titanium crossbeams of the forward engine mount. The FAA is issuing this AD to address failure of a crossbeam of the forward engine mount, which could result in detachment of the engine and consequent reduced controllability of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with European Aviation Safety Agency (EASA) AD 2018-0212, dated September 28, 2018 (“EASA AD 2018-0212”), or EASA AD 2018-0212R1, dated March 28, 2019 (“EASA AD 2018-0212R1”).

(h) Exceptions to EASA ADs 2018-0212 and 2018-0212R1

(1) For purposes of determining compliance with the requirements of this AD: Where EASA ADs 2018-0212 and 2018-0212R1 refer to the effective date of EASA AD 2018-0212 (October 12, 2018), this AD requires using the effective date of this AD.

(2) Where paragraph (2) of EASA ADs 2018-0212 and 2018-0212R1 specifies replacing “with instructions provided by Airbus,” for this AD, the replacement must be done using a method approved in accordance with the procedures specified in paragraph (i)(2) of this AD.

(3) Where paragraphs (1) and (3) of EASA ADs 2018-0212 and 2018-0212R1 specify flight cycles (FC), this AD requires using “total flight cycles.”

(4) The “Remarks” sections of EASA ADs 2018-0212 and 2018-0212R1 do not apply.

(i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Section, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or EASA; or Airbus SAS’s EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) *Required for Compliance (RC)*: For any service information referenced in EASA AD 2018-0212 or EASA AD 2018-0212R1 that contains RC procedures and tests: Except as required by paragraph (i)(2) of this AD, RC procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are

recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(j) Related Information

For more information about this AD, contact Sanjay Ralhan, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3223.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) European Aviation Safety Agency (EASA) AD 2018-0212, dated September 28, 2018.

(ii) European Aviation Safety Agency (EASA) AD 2018-0212R1, dated March 28, 2019.

(3) For EASA AD 2018-0212 and EASA AD 2018-0212R1, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 89990 6017;

email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find these EASA ADs on the EASA website at <https://ad.easa.europa.eu>.

(4) You may view these EASA ADs at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. EASA AD 2018-0212 and EASA AD 2018-0212R1 may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-1068.

(5) You may view this material that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on June 10, 2019.

Michael Kaszycki,
Acting Director,
System Oversight Division,
Aircraft Certification Service.

[FR Doc. 2019-13059 Filed: 6/19/2019 8:45 am; Publication Date: 6/20/2019]